DEPARTMENT OF DEFENSE APPROPRIATIONS FOR 1952

HEARINGS

BEFORE THE

SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
UNITED STATES SENATE

EIGHTY-SECOND CONGRESS

FIRST SESSION

MAKING APPROPRIATIONS FOR THE NATIONAL SECURITY COUNCIL, THE NATIONAL SECURITY RESOURCES BOARD, AND FOR MILITARY FUNCTIONS ADMINISTERED BY THE NATIONAL MILITARY ESTABLISHMENT FOR THE FISCAL YEAR ENDING JUNE 30, 1952, AND FOR OTHER PURPOSES

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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR 1952

THURSDAY, JUNE 7, 1951

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to call, in the main caucus room, Senate Office Building, Hon. Joseph C. O'Mahoney (chairman of the subcommittee) presiding.

Present: Senators O'Mahoney, Hayden, Maybank, Hill, Ferguson, Wherry, Young, and Thye.

STATEMENT BY CHAIRMAN O'MAHONEY

Senator O'MAHONEY. The committee is now in session.

This meeting has been called as a preliminary to the detailed examination by the committee of the budget estimates which have been sent to the Congress. The fact that in the House of Representatives the committee has been at work for more than 4 weeks dealing with the estimates presented by the Navy alone is sufficient evidence of the magnitude of the task that is presented to us.

TOTAL OBLIGATIONAL AUTHORITY

For the year 1951, Congress has appropriated something more than $48 billion for the Defense Establishment. The budget which is before us now accounts for $57,604,254,390, and that is exclusive of the estimate which will arrive later on with respect to public works construction.

When the budget itself was submitted, it was there stated that the amount for public works construction for defense would be $4½ billion. We understand it is going to be considerably more than that now. But in any event, the figures indicate clearly how difficult is the task which has been laid upon the Defense Establishment.

It was felt that we should have this preliminary session, at which the Under Secretary of Defense, the Secretaries of the three branches of Defense, and their aides and assistants, and the head of the Munitions Board should have the opportunity to tell the committee and the country the steps which have been taken to scrutinize the expenditure of this tremendous fund.

When it is recalled that the appropriations for the entire operation of the Federal Government in 1939 for Army, Navy, and the United States Air Corps as it was then, for the cost of Congress and the courts, for the executive branch of the Government, for veterans' aid, for foreign responsibilities, and for all the expenditures, including interest upon the national debt, amounted to only $10,300,000,000, it

becomes clear what a terrific task the people of the United States have assumed, when, in the midst of what is clearly a cold war, the Congress is asked to commit more than $62 billion for defense alone.

So we recognize the great responsibility that you gentlemen have assumed, and we felt that you would like to have the opportunity of explaining to us, as a background, and also to the country, the steps that you have taken to see that this sum is expended as economically as possible.

Under Secretary Lovett, we shall be very glad to have you open the presentation. I might add that the committee will be quite agreeable to permitting you to present your statement without interruption, and we shall postpone the questions until you have concluded. We do this in the hope of expediting the presentation.

STATEMENT OF HON. ROBERT A. LOVETT, UNDER SECRETARY OF DEFENSE

TOTAL BUDGET ESTIMATE

Mr. LOVETT. Thank you, Mr. Chairman.

In appearing before this committee to justify new obligational authority totaling $60,650,000,000, for the military functions of the Department of Defense for fiscal year 1952, I believe it might be helpful to outline the manner in which this request was developed and the steps we have taken looking toward good management of the funds already appropriated and the additional funds contained in this budget request.

FORMULATION OF DEFENSE BUDGET

The formulation of this budget is based on military requirements and not on an allocation of dollars. It began on December 14, 1950, when the National Security Council approved military forces for fiscal year 1952 totaling about 3½ million men—the Army to be organized into 18 divisions plus a number of regimental combat teams and supporting units; the Navy to maintain an active fleet of 1,161 ships with the necessary aircraft and supporting elements; the Fleet Marine Force to consist of 2⅓ divisions with essential aircraft and supporting units; and the Air Force to continue building toward a 95-wing structure and certain separate squadrons and supporting units. At the same time, the National Security Council directed us to review our matériel requirements and to establish an industrial production capacity which could be expanded very rapidly in the event of full mobilization. The Secretary of Defense immediately directed the three military departments to prepare a preliminary estimate of the matériel and supplies required to meet the objectives established by the National Security Council.

ORIGINAL BUDGET ESTIMATES

The first rough estimates developed in the three military departments during January and early February indicated that about $104 billion would be needed to finance the build-up in forces and matériel during the remainder of fiscal year 1951 and fiscal year 1952. After discussion with the Secretaries of the three military departments,

these estimates were again reviewed within the military departments. In order to expedite this review and to consolidate into a single review the analysis that would also have to be carried on in the Office of the Comptroller of the Department of Defense and the Bureau of the Budget, the budget staffs of these two organizations were made available to the military departments to work under the supervision and direction of Under Secretary Kimball of the Navy, Under Secretary McCone of the Air Force, and Assistant Secretary Bendetsen of the Army.

Groups of expert civilians were called in to assist in the review of certain parts of the program, notably public works, and we retained consulting engineers and teams of expert consultants from the graduate schools in order to give us the benefit of an impartial and unemotional screening of both the requests and our procedures in dealing with them.

INTENSIVE BUDGET REVIEW

As a result of an intensive review by these groups requiring 2 months, they were able to identify and to a large extent eliminate duplications in requests, items of doubtful value, easy-to-get items which although eventually needed could be deferred until the hard-to-get items were well on the way to delivery, and elimination of financing requests beyond minimum lead time for reorder. The review also developed major policy questions which were then decided in a 2-day conference between the Secretaries of the military departments and the Chiefs of services, representatives of the Bureau of the Budget and the Office of the Secretary of Defense. This budget was then formally submitted to the Bureau of the Budget where minor modifications were made in the interest of national policy before it was submitted to the Congress on April 30, 1951.

ACTIVITIES PROVIDED FOR BY BUDGET REQUEST

The budget for the military functions of the Department of Defense for fiscal year 1952 provides funds:

(1) For the full support of the active forces;

(2) For the procurement of aircraft, ships, tanks, guns, ammunitions, and similar critical items in quantities sufficient to equip the active forces with modern equipment at an early date;

(3) For production facilities including machine tools, and tooling beyond those needed for current use but which would be required for full mobilization; and

(4) For a military public works program to meet the essential operational requirements of our expanding forces.

PROCUREMENT

The major portion of the budget is for procurement—almost $44 billion of the $60.7 billion is for procurement and construction. Of this amount, nearly $34.7 billion is for hard goods—that is, aircraft, ships, tanks, artillery, ammunition, and similar critical items needed to equip our Armed Forces; $4½ billion is for public works; and approximately $5 billion for soft goods.

PUBLIC WORKS

We believe that our request for public works will meet the minimum operational requirements of the military services and leave for financing in future years items that are necessary for continued use of a base, camp, or station, but not essential to meet present minimum operational needs. We plan to build permanent and semipermanent facilities that will be useful for a number of years rather than temporary structures which will be a wasting asset and much more expensive in the end.

BUDGET FOR KOREAN WAR

During the course of your review of this budget, the question of the amount that has been included for the support of our efforts in Korea during fiscal year 1952 is certain to arise. During the formulation of this budget, which, as I have indicated, began late in December, we did not feel that we could or should forecast the probable military situation in Korea during fiscal year 1952. Therefore, lacking specific knowledge on which to base a budgetary request we have with certain exceptions made no specific allowances for combat consumption rates during fiscal year 1952. We have included Korea at standard consumption rates instead of combat rates. This is most significant in the case of the Department of the Army since consumption of supplies, ammunition, and other equipment will be substantially higher if hostilities continue during fiscal year 1952. It does not appear feasible even now to attempt to forecast the extent to which additional funds may be required to support our efforts in Korea. We propose, if it meets with your approval, to meet this requirement by utilizing production and procurement which is financed in this budget so as to give first priority to filling our needs in Korea and to request that the Congress at a later date supply such funds as may be required to replace the matériel and supplies that may have been expended in combat, as compared with peacetime consumption rates.

DELIVERY OF SUPPLIES AND EQUIPMENT

Except for this unknown factor, we believe we have adjusted our request to the minimum needed to assure increasing deliveries of supplies and equipment and to prevent a break in production in fiscal year 1953. To secure deliveries of material in quantities necessary to bring the Armed Forces to the State of readiness planned by the National Security Council we must spend the $40 billion estimated for fiscal year 1952, of which about $25 billion will be for hard goods and construction. To accomplish this, it is necessary to have in fiscal year 1952 obligational authority for substantially more than the $40 billion which it is estimated will be expended.

The major factor in this relationship between obligational authority and expenditures is production lead time which we sometimes call reorder lead time. For example, the lead time on fighter aircraft is about 18 months. Therefore, in the final month of fiscal year 1952, we must have available funds sufficient to finance approved aircraft procurement programs, at the very minimum, through December 31, 1953. Anything less than this would cause the pipeline of raw materials and components flowing into the plants to dry up since the manufacturers only put out orders when they have a firm contract on

their books. Lead time for some categories of ships may be as high as 2 to 3 years while on procurement generally the lead time is from 6 to 10 months. To the best of our ability, we have provided funds to support the essential procurement programs through these minimum lead-time periods. However, on the basis of past experience, it may be expected that some programs will proceed more rapidly than anticipated. Should desired progress on most or all of our programs be attained or if subsequent evaluations of the world situation require additional forces or further expanded procurement, it may be necessary for us to request additional funds furing fiscal year 1952.

REVIEW OF PROCUREMENT POLICY

You, gentlemen, are well aware of the tremendous size of the enterprise we are embarked upon. You are familiar with its complexity. There are over 360,000 separate types of items requiring some form of scheduling. The process of review and justification is, therefore, a most difficult one. Accordingly, we have endeavored to direct our attention to the major items of supply and equipment which perhaps constitute 75 percent of the cost. We have tried to deal with the problem in a business-like manner, taking into account, among other things, the important element of time of need so as to avoid the injection into our national economy of any overlarge amounts of readily procurable items in common civilian use. We have tried to stress the hard-to-get items of military equipment and to spread the load in an orderly fashion. We hope that the detailed justifications indicate the attempt we are earnestly making to exercise control and management and develop techniques for the efficient handling of the manifold new problems which arise out of partial mobilization.

IMPACT ON ECONOMY

We consider the preparation of our budget request to the Congress as the first step in the process of translating military plans into the manpower and matériel which will produce the state of readiness recommended by the Joint Chiefs of Staff. This translation of dollars into equipment and supplies during this period of limited mobilization will require an even higher degree of coordination and management than it has been necessary to exercise either under all-out war conditions or under the much smaller budgets of the previous years. We are aware of the impact the release of $60 billion of purchasing power can have on the economy of the United States, and we know that this economy is, in the final analysis the most important military asset of this Government. Without its ability to produce large quantities of high quality material, the military potential of this country would be substantially lower.

In order that the members of this committee may have a better understanding of what we are doing along this line, I have asked Assistant Secretary McNeil to outline for you the general directive issued by the Department of Defense on May 31 which states the policy and general program to be followed by the Department of Defense in the placement of procurement contracts for matériel, equipment, and supplies.

Mr. Small, Chairman of the Munitions Board, is here to outline the manner in which we are utilizing small business in this procure-

ment program, and the Secretaries of the Departments of the Army, Navy, and Air Force are here to provide members of the committee with information as to specific problems and actions.

Mr. Chairman, if it meets with the pleasure of the committee, I will ask Mr. McNeil to follow with the detailed explanation of the specific directives.

Senator O'MAHONEY. Mr. McNeil?

STATEMENT OF HON. W. J. McNEIL, ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)

PROCUREMENT MANAGEMENT PROBLEMS

Mr. MCNEIL. Mr. Chairman and members of the committee, in recognition of the procurement-management problems inherent in the augmented defense program during the next year, the President on April 27, 1951, directed the Department of Defense in cooperation with the Office of Defense Mobilization, its subsidiary agencies, and the Bureau of the Budget:

1. To establish realistic production schedules for hard goods items;
2. To establish definite policies under which instructions can be given to the procurement officers, so that the whole range of soft goods and unscheduled items can be bought in an orderly manner; and,
3. To establish special controls over major special procurement programs such as facilities, tools, lumber, petroleum, wool, and cotton goods.

In implementing the President's directive the Department of Defense has adopted the principle that once the approved active forces are raised and modernized and current operating stocks are on hand, maximum feasible reliance will be placed on continuing expansible production rather than on reserve stocks of end items.

Accordingly, the basic objective of the military procurement program will be to supply the services the material and equipment required for the timely accomplishment of their respective missions. In doing so, the procurement and delivery of all items will be scheduled in a carefully planned and balanced manner to meet the actual service needs. At all times the present and future productive capacity of industry will be given full consideration and plans will, among other things, provide for the maintenance of production lines, and whenever possible, take into account the rapid expansibility of these lines.

REVIEW OF PLANNED PRODUCTION SCHEDULES

Planned production schedules to cover approximately 75 percent of the amounts available for hard goods will be reviewed before approval by the Office of the Secretary of Defense. To accomplish this, a list of more than 600 items has been compiled which together constitute over 75 percent of the total dollar value of the planned hard-goods procurement. These schedules will indicate for each specific item the plants in which production is proposed and the anticipated quarterly delivery rate expressed in terms of units. The schedules will be supported with data to justify the proposed quantity, the rates of delivery indicating the necessity for any peaking or departure from a reasonably smooth production curve.

More specifically, the military departments have been directed to adhere to the following criteria in the preparation of these planned production schedules:

1. Schedules must be realistic. Among other things, they are to take into account conditions as respects availability of facilities, materials, manpower, and other factors.

2. Procurement programs are to be orderly and are to minimize severe, unnecessary jolts on the economy.

3. Where items are related, the scheduling of the easier-to-get items is to conform to that of the more difficult.

4. The quantities scheduled are to be projected to cover all hard-goods-procurement programs financed or to be financed from funds of the Department of Defense as well as the mutual defense assistance procurement programs.

5. Each military department in determining requirements is to do so in sufficient detail to identify requirements for initial equipment, combat and peacetime usage, pipelines and war reserves, and take into account inventory position and matériel on order, each giving consideration to the potential capacity of projected production lines.

5. In addition to carefully planning production schedules within major programs, the several programs of the three services are to be interrelated one to the other and modified where necessary if the composite produces a requirement for materials, manpower, or other resources in excess of availability. The responsibility for the interrelation of the several programs and the authority for necessary modifications rests with the Munitions Board based on the military guidance of the Joint Chiefs of Staff.

These production schedules are to be submitted by the three military departments to the Munitions Board for review and approval from the standpoint of material availability, plant and facility availability, and production feasibility. They also are to be reviewed and approved by the Assistant Secretary of Defense (Comptroller) from a budget and fiscal standpoint.

The remaining 25 percent of hard-goods procurement, the schedules for which are not required to be submitted to the Office of the Secretary of Defense for specific approval, are to be managed within the military departments in a similar manner and in accordance with the criteria which I have just outlined.

PROCUREMENT OF "SOFT GOODS"

In order to insure orderly procurement of the so-called soft goods the Secretary of Defense has established the following ground rules:

1. Soft goods are to be planned, or scheduled, for procurement only at the rate required to meet valid military requirements and in such a manner that, wherever practicable, production peaking will be avoided by the spacing of deliveries.

2. For items of soft goods for which the total fiscal year 1952 procurement objective for any one military department exceeds $2 million, no more than one-third of the procurement objective for the year shall be contracted for delivery during any single quarter. In those cases in which the seasonal character of procurement, combat needs, or similar considerations indicate the desirability of contract delivery beyond these limits, such deviations will be authorized by the Secretary of the appropriate military department.

3. Procurement of soft goods is to be phased with deliveries of related items of hard goods or other equipment.

AUDIT OF PROCUREMENT PROGRAM

The Munitions Board, in addition to having responsibility for periodic review of progress on production schedules approved by them will have responsibility for the periodic audit and review of planned production schedules approved within a military department for hard goods items, for planned procurement of soft goods, and for procurement practices at all procurement levels. The Munitions Board will be responsible for integrating this process with the interests and responsibilities of the production agencies and providing for their consultation and assistance.

INVENTORY CONTROL SYSTEMS

While a great deal of effort has been devoted to the inventory problem, and you might say considerable progress has been made, instructions have been issued to review the methods and adequacy of the inventory control systems and procedures maintained by each military department. The objectives of this review will be that:

1. Inventories are properly considered in the computation of "net" requirements and prior to buying.
2. A proper balance exists within each military department between the supply of and demand for individual end items of matériel.
3. Inventory levels are sufficient to insure an ability to furish supplies to the combat and service components of the respective departments in sufficient quantity, where needed, and in time.
4. Supplies may be furnished on a cross-servicing basis as desirable or necessary by any department to the combat and service components of the other departments.
5. As a long-term objective the military departments will develop and implement uniform policies and procedures for inventory control and inventory systems where uniformity is feasible.

CONTROL OF PROCUREMENT PROGRAMS

Procurement of petroleum products will continue to be programed in direct relation to the requiremens of the operating forces, including approved reserve stocks and other governmental program requirement handled by the military departments.

The President specifically directed that control be established over certain special procurement programs such as facilities, hand tools, lumber, petroleum, wool, and cotton goods. To effect this control committees are being created within the Department of Defense to examine the programing and procurement procedures for each of these commodities.

MACHINE TOOLS AND PRODUCTION EQUIPMENT

The military departments have been directed to accelerate approved plans for maximum utilization of their equipment reserve of machine tools and production equipment to meet their current requirements before initiating procurement of such items. The Munitions Board

is responsible for allocating machine tools to the military departments. In making such allocations the Munitions Board is to give full consideration to requirements of the military departments for machine tools to meet their respective needs and to instances where the unavailability of machine tools would force a delay in programs. Such actions are to be based upon the military guidance of the Joint Chiefs of Staff.

Machine tools are being procured to meet the requirements of current production and to establish tooled production lines with capacity in excess of current needs. The highest priority is to be given to the requirements of the military departments for current production needs and secondary priority to the machine-tool requirements for the so-called excess capacity.

ASSISTANT SECRETARY FOR MANPOWER AND PERSONNEL

An Assistant Secretary of Defense has recently been assigned the responsibility for manpower and personnel, on a full-time basis, in order to give increased emphasis to the control and utilization of personnel. Work is now under way on the development of the necessary procedures and the Department of Defense plans, at an early date, to have a comprehensive program to achieve better utilization of employees, and adequate control of employment. We expect to be able to report satisfactory progress in this important field before this committee completes the current series of hearings.

PROGRAM COORDINATION

In addition to specific actions which have just been outlined, statutory agencies under the Secretary of Defense, such as the Research and Development Board and the Munitions Board, are to carry out their responsibilities for coordination of the programs of the departments. Presently a primary responsibility is to see that proper emphasis is placed upon these programs or items which are of the greatest need to the Department of Defense as a whole.

The Munitions Board, for example, is allocating tools and production facilities between the various, and sometimes competing, programs of the services in order that those items having the greatest priority will not be unnecessarily delayed. The Munitions Board also has responsibility for coordination between the services on all procurement matters including the supervision and control over items which the services might otherwise seek to procure in competition with each other.

Before proceeding to the next portion of this presentation I would like to assure the committee that the responsible officials in the Department of Defense and in each of the three military departments are aware of the magnitude of responsibility which must be assumed. The procedures, which I have just outlined, worked out in consultation with officials of the three military departments, are an indication of the importance attached to these problems. I believe that you will find, as you listen to the statements of the three military departments, that each fully appreciates the importance of doing everything within its power properly to manage the programs which will be presented during the course of your hearings.

Senator HAYDEN. Was any program of this kind, such as you have outlined, prepared and adopted during the 2 years prior to the Second

World War? In other words, did you have anything except the errors that were developed to go on?

Mr. McNeil. That is antedating my time, sir, but I know of nothing specific where the course was charted as clearly. This, I believe, does try to take advantage of lessons which had to be learned the hard way over the last 8 or 10 years.

Senator Hayden. Investigations have shown at various times what tremendous efforts were made in duplicating the acquisition of materials which were found not to be needed, and, again, the use of civilian manpower. This is the first time that I have ever heard of a program of this kind being adopted, or even studied, to meet a situation such as now faces us.

Mr. McNeil. Thank you, sir. The three military departments and the Office of the Secretary of Defense have never, I believe, worked as closely as a team as we find to be the case now. And I believe we all have one aim, and that is to do it as nearly right as human beings can do it.

Senator Hayden. Thank you.

Senator O'Mahoney. The next witness will be Mr. Small, I understand.

You may proceed, Mr. Small.

STATEMENT OF JOHN D. SMALL, CHAIRMAN, MUNITIONS BOARD

SMALL BUSINESS PROCUREMENT

Mr. Small. Mr. Chairman and members of the committee, I welcome this opportunity to appear before your committee to discuss with you the Department of Defense small business program and its related problems. I shall confine my remarks in this statement to a brief discussion of the progress that has been made, together with a general discussion of our plans for the future.

As I am sure you know, the Munitions Board is not an operating agency. The duties of the Munitions Board include the coordination of the production and requirements activities of the military departments and supply management generally, which, of course, includes small business, and which also includes such important matters as cataloging, standardization, packaging, material inspection policies, transportation, et cetera. These duties are in addition to the important functions already described to you by Assistant Secretary McNeil. I shall limit my discussion to the small business aspects of our work.

First let me define what is meant by the term "small business." In the Department of Defense, a small business is one in which the aggregate number of employees, including its corporate and partnership affiliates, is less than 500.

Small business concerns comprise a very substantial portion of the industrial production potential of the United States. We feel that numerous healthy small business concerns, learning how and doing business with the armed services and their suppliers, are a very great asset in providing now the nucleus for mobilizing all our industrial resources, small and large, in the event of total war. We also feel that the prosperity and growth of new small business concerns are corner stones in the strength of our over-all economy, which fundamentally

is the source of our military material strength. We believe that qualified small business concerns which are aggressive, alert, and willing to work, must be given a reasonable opportunity to participate in military procurement and to find a proper place, either at the prime contract level or more likely, at the subcontract level, and without the crutch of price subsidies.

It is a fact that the services have a selfish interest in helping small business because they know they need this capacity. We are doing something constructive about it. Much has been done already. In my opinion we are further along now than we were at a comparable period in World War II. However, much more remains to be done, and I assure you that we will continue our efforts to help small business with sincerity and firm purpose.

SMALL BUSINESS PROGRAM

Specifically, the following nine-point program of policies and procedures of benefit to small business are being followed in the Department of Defense:

(1) In the implementation of the program to broaden the industrial base of suppliers, small-business concerns within the limits of their capabilities, are being given full and serious consideration in the establishment of new sources.

(2) Small-business specialists are being assigned to each major procurement office in order to devote their efforts exclusively toward assisting small-business concerns. Such specialists are charged with the responsibility to review requirements prior to procurement action, to determine which requirements are susceptible of being filled by small business, and to recommend target objectives with reference to the amount of military business which should be awarded to small concerns.

(3) Although there are many major items of procurement that cannot be divided into small lots and produced by small business, for example, airframes, aircraft engines, tanks, et cetera, we have directed that wherever practicable, procurements be divided into reasonably small lots to bring the sizes of requirements within the reach of a greater number of suppliers.

(4) Prospective contractors not familiar with military procedures are given assistance in learning how to do business with the Department of Defense through the media of publications, Government small-business clinics, and the operation of the Central Military Procurement Information Office, and the Munitions Board Office of Small Business.

(5) To publicize military requirements to be purchased by formal advertising, unclassified invitations to bid are listed in the Department of Commerce daily synopsis of bid invitations. To provide information concerning potential subcontract business, unclassified prime contracts over $25,000 are included in the Department of Commerce weekly synopsis of contract awards. These synopses are distributed nationally through over 6,000 outlets. Instructions have just been promulgated to publicize proposed negotiated procurements in the same manner.

(6) Subcontracting is encouraged, where necessary and required, in dealings with the larger prime contracts.

(7) Small-business concerns are being made acquainted with subcontracting opportunities by means of a series of exhibits featuring the components and assemblies of end items contracted for with prime contractors.

(8) Up-to-date listings of qualified suppliers are maintained in all purchasing offices of the Department of Defense, small concerns are enabled and encouraged to qualify as bidders for those items which they are capable of manufacturing.

(9) Information with respect to the capacities and skills of small-business concerns is compiled for use not only in current military procurement but also for use in mobilization planning.

PRIME CONTRACTS AWARDED TO SMALL BUSINESS

I know that the committee will be interested in our latest compilation of prime contract awards to small business. During fiscal year 1950, $1,310,615,000, or 24.5 percent, of the annual total was awarded to small business. However, during the first 10 months of fiscal year 1951, through April 30, small business has been awarded a total of $4,300,000,000 or more than three times the amount they received during the entire fiscal year 1950. This represents 22.5 percent of the total awards. However, the percentage is increasing, for example, during April, small business received 28.8 percent.

A breakdown of Department awards to small business for the months of January and April of this year indicates a trend which we hope will continue. The Air Force awarded 18 percent of its total procurement in April to small business as against 10.2 percent in January. The Army awarded 40 percent in April as against 22.4 percent in January; and, the Navy awarded 16.2 percent in April as compared to 12.5 percent in January.

During the period July 1, 1950, to March 31, 1951, small business received 67 percent of the number of contracts awarded by negotiation, which represents 12 percent of the dollar value. This percentage is also increasing in that while during the month of April small business still received approximatelythe same percentage of contracts awarded, it received 27 percent of the dollar value.

At this point I would like to offer for inclusion in the record a compilation of military purchase actions for the period July 1, 1950, through March 31, 1951, which is attached as the last page of this statement.

Senator O'MAHONEY. It will be inserted in the record at the conclusion of your statement.

Mr. SMALL. Thank you, sir.

As a matter of interest we have made an attempt to analyze the figures contained in this table and to determine first, which items of our requirements small business could actually produce, and, secondly, what proportion of these requirements they are actually producing. It is obvious that small business is not equipped to produce aircraft carriers, airframes, airplane engines, tanks, et cetera, to mention only a few. On this basis, we found that in the Department of the Navy small business actually received 40.6 percent of the total requirements for those items which small business could produce. The Department of the Army purchased 39.1 percent of such items from small business. While the Air Force analysis is not complete, the elimina-

tion of aircraft alone from the Air Force procurement program increases its percentage from 11 percent to 26 percent. These figures reflect procurement action during the period July 1, 1950, to March 31, 1951.

As a further indication of small business participation in our procurement program the Air Force reports that its 102 field installations scattered throughout the country have purchased locally $43,750,000 worth of material during the first 2 months of this calendar year. Of this amount, 70 percent or $30,453,000 went to small concerns. This 70 percent is an increase from 64 percent for the last quarter of 1950. Only yesterday the Navy Department announced that contracts for the construction of 102 barges, at a total cost of more than $2,000,000, had been awarded to eight small business firms.

DEFENSE SUBCONTRACTS

It is relatively easy to prepare statistics covering the award of prime contracts to small business. It is very much more difficult to accumulate information concerning the substantial share of defense procurement that is going to small business through subcontracts. It is certain, however, that the dollar volume of work going to small business through subcontracts is manyfold the volume going to them through direct contracts.

Subcontracting must be recognized as an effective instrument in the distribution of military procurement to these smaller independent enterprises not equipped to undertake prime contracts. Much of our effort has been directed toward aiding those small enterprises having no existing subcontract arrangements with larger producers. Such firms normally engaged in the manufacture of civilian products are now short of the raw materials to continue their line. For example, to aid those seeking subcontracts, the Department of the Air Force recently arranged an exhibit of prime contractors in New York City where prints, drawings, and specifications were available to potential subcontractors. This plan, developed by the Air Force, proved so successful that another exhibit was arranged at Chicago last month, and another show sponsored by all three military departments was held in Boston on May 15. Additional exhibits will be arranged through the cooperative efforts of the Army, Navy, and Air Force at Detroit, Los Angeles, Fort Worth, and other principal cities.

The extent of subcontracting is best demonstrated in a recent study of 863 Air Force prime contracts, totaling approximately $5 billion. The data collected indicated that approximately 75 percent of the subcontracts were awarded to companies employing less than 500. In compiling this information, Air Matériel Command representatives approached 59 major prime contractors in every field of production. These prime contractors submitted figures which included a total of 32,382 subcontracts. Of this total 24,306 of the subcontractors were in the category of small business who cannot produce engines, airframes, et cetera, but could produce components.

Subcontracting in the aircraft industry is now approaching World War II levels, on the basis of the proportion of the program which is subcontracted. The reason for the high percentage of subcontracting is that the emphasis today is not so much on production as productability—expanding and production base so that 50,000 planes a year could be built, should it become necessary to do so.

The Department of Defense has been acutely aware of the need for widespread contracting in order to broaden the mobilization base and to make possible greater participation by small business. In General Marshall's directive of December 18, 1950, he specifically pointed out the necessity for "the aggressive encouragement or requirement of subcontracting by prime contractors." We are pursuing this policy aggressively and procurement officers have been directed to take particular account of the extent of subcontracting the prime contractor is willing to do as one of the factors in the negotiation and pricing of prime contracts. In fact, the subcontracting plans of the large prime contractor are thoroughly discussed with him before he gets his contract. In this connection, the Air Force contracts contain the following article:

> It is mutually understood and agreed that the policy of the Government, as declared by Congress in Public Law 413, Eightieth Congress, is to bring about the greatest utilization of small plants' facilities which is consistent with efficient production.
>
> The contractor agrees to accomplish the maximum amount of subcontracting to smaller plants that the contractor finds to be consistent with the efficient performance of all its other obligations undertaken by this contract.

UNIFORM SUBCONTRACT CLAUSE IN PRIME CONTRACTS

The Army and Navy take similar steps to encourage subcontracting and we are at present attempting to develop a uniform clause for this purpose.

As a point of interest, a recent survey made by the Army, covering 13 selected prime contracts, amounting to approximately $900 million, revealed that small business received 42 percent of the total dollar value through subcontracting.

This emphasis on subcontracting must be applied with discretion, because to specifically require a prime contractor to subcontract a particular item, or with a particular supplier, would in effect relieve him of certain of the responsibilities inherent in the original contractual arrangement.

I know that we have recently been criticized for deleting quantity and dollar value information from the weekly synopsis of awards. I would like to also point out that we have been severely criticized for giving too much detailed and pinpoint information to our potential enemies.

In order to insure that the small contractor gets adequate information to assist him in determining subcontracting sources, and at the same time preserve our security, the Munitions Board has now approved the publication by the Department of Commerce of quantities and values of unclassified negotiated and formally advertised contract awards between $25,000 and $250,000. If a transaction exceeds $250,000 this fact will be indicated, but quantities will not be furnished. We believe that this policy will satisfy all the divergent views and eliminate the last vestige of complaint of military policy in this field.

It should be pointed out that the Munitions Board itself buys nothing nor does it place contracts. Further, we have no authority to designate those individual firms who will receive contracts. What we try to do is to help the small-business man by telling him what work is needed, by what office it will be let, and how to present his

case to the procurement offices. In addition, the Office of Small Business works with the staffs of the individual members of Congress in advising them how best to answer the questions presented by their constituents.

I would like to emphasize that the problems of small business can be solved only by constant daily thought by every procurement officer as they consider each purchase as to what extent small business may supply the item needed. I recognize as a very basic task, the need for continued education of all personnel engaged in military procurement and their thorough indoctrination in the importance of affording small business an opportunity to participate. This is being done; in fact the Army completed its first seminar for Small Business Specialists Tuesday of this week and the Navy and Air Force have similar programs. I feel considerably encouraged at the marked progress recently evidenced in this field.

I know that you gentlemen realize that the accomplishments we have attained in our small business program have not been without cost, both in time and money, and I would like to outline very briefly some of the problems we have faced in this respect.

BIDDERS' LISTS

For instance, since the inception of our present small business program in 1949, the procuring services have expanded their bidders' lists at frequent intervals. In many of the services, bidders' lists for certain classes of items now contain as many as 4,000 names each, even though they are policed regularly in order to insure that they contain only active suppliers. The average cost of maintaining bidders' lists approximates $1.25 per name per year.

COST OF DISTRIBUTION OF INVITATIONS TO BID

In addition to this cost, the cost of preparing and distributing invitations to a representative segment of potential suppliers is surprising. Possibly we have gone too far in trying to get invitations into as many hands as possible—particularly on small procurements. The Ordnance Corps of the Army recently issued an invitation for stampings for 22-millimeter guns. This invitation, valued at $2 per set, was sent to 245 names on the list, at a cost for the invitation only of $490 for a $2,358 purchase.

On more technical items, such as tanks and airplanes, as you can well understand, the cost of invitations for bids is much higher and in some cases may reach the surprising figure of $3,000 to $4,000 per set. I hope that you will agree with our policy of not furnishing every name on the bidders' list and all other inquirers with copies of these invitations. To do so would mean that often the cost of publicizing procurements would exceed the actual cost of the procurement. The Department of Commerce synopsis, as recently improved, is serving to aid both the Department of Defense and small business, since it permits us to widely publicize procurements without the necessity for supplying bid sets to all firms who may have an interest in a particular procurement.

To give you some idea of the cost and administrative workload imposed on the departments in the distribution of invitations for

bids I cite the following tabulation of five recent procurements made by the Navy Purchasing Office, Washington:

Invitation No.	Item	Number of bidders on mailing list	Request for bid sets (in addition to mailing list)	Bid sets distributed (including mailing list)	Bids received
5115-0	Ammunition boxes	55	959	759	81
5119-0	Front closure assembly	42	797	526	121
5130-0	Rocket tanks	37	557	505	41
5133	Pallet racks	258	701	959	263
5135	Tool boxes	115	561	676	109

That shows you the wastage in the numbers that you send out.

SMALL BUSINESS SPECIALISTS

The employment and training of small business specialists is also a major item of cost in our efforts to insure that every possible aid is given to small business under the Department of Defense procurement program. The continued development of the policies and program to aid small business will require a considerable amount of effort on the part of many key personnel. The Department of Defense intends to assign as many personnel, and to devote as much time to this program of helping small business as is required to guarantee its success. We are determined to get results.

Thank you.

(The tabulation appended to Mr. Small's statement follows:)

Number and value of purchase actions of the military departments in continental United States, March 1951, and cumulative, July 1, 1950, to Mar. 31, 1951

Category	March 1951				July 1, 1950, to Mar. 31, 1951			
	Contract value		Number		Contract value		Number	
	Amount in thousands	Percent	Total	Percent	Amount in thousands	Percent	Total	Percent
Total	$2,942,804	100.0	196,563	100.0	$16,152,876	100.0	1,470,690	100.0
Formally advertised	172,101	5.8	10,611	5.4	2,719,302	16.8	119,749	8.1
Negotiated	2,770,703	94.2	185,952	94.6	13,433,574	83.2	1,350,941	91.9
Small business, total	761,200	25.9	143,101	72.8	3,394,380	21.0	1,076,750	73.2
Advertised	96,143	3.3	8,029	4.1	1,151,985	7.1	87,980	5.9
Negotiated	665,057	22.6	135,072	68.7	2,242,395	13.9	988,770	67.3
Other business, total	2,181,604	74.1	53,462	27.2	12,758,496	79.0	398,940	26.8
Advertised	75,958	2.6	2,582	1.3	1,567,317	9.7	31,769	2.2
Negotiated	2,105,646	71.5	50,880	25.9	11,191,179	69.3	362,171	24.6

Senator O'MAHONEY. The next witness is Secretary Pace.

STATEMENT OF HON. FRANK PACE, JR., SECRETARY OF THE ARMY

DEPARTMENT OF THE ARMY BUDGET REQUEST

Secretary PACE. Mr. Chairman and members of the committee, in my estimation, today provides the Department of the Army with a unique opportunity to give you a detailed explanation of just exactly how we formulated our 1952 budget. This request, aggregating $20,799,000,000, emphasizes that the Army is the biggest business organization in the world today. It is appropriate, before going into the details of this budget, that together we consider, first, how the Army decides how much money to ask for, and, second, what steps it takes to insure sound management of the military dollars you appropriate. Also, I would like to tell you about some of the unit-price increases which are involved in today's cost of many items of military equipment.

COMPILING AND SCREENING THE BUDGET

Before the Army can determine how much money it needs during a fiscal year, it has to know what its objectives are—what its size is going to be and what is expected of it. In December of last year the Joint Chiefs of Staff reconsidered preparedness programs and recommended the military forces that they felt the Army and its sister services must have by the end of fiscal year 1952 to defend this Nation.

These recommendations, as finally approved by the Secretary of Defense, the National Security Council and the President, established the objectives which guided the services in preparing their respective budgets for this coming fiscal year. The Army, for example, amplified these objectives and issued them in the form of a budget directive to all of its estimating agencies.

These agencies then prepared their estimates in accordance with this budget directive and submitted them to the Army's Budget Advisory Committee—a permanent agency within the Department of the Army, consisting of the Army's budget officer, who acts as its chairman, and general officers from each of the several general staff divisions. This committee then conducted hearings during which each estimating agency was called upon to justify its requests. After this committee had made substantial reductions in the initial estimates, this budget was submitted in turn to the Chief of Staff and to the Secretary of the Army for preliminary review. Concurrently, the estimates of the Air Force and Navy were also undergoing similar reviews.

These preliminary estimates, themselves subject to an internal review, were then subject to review by the Department of Defense. Consequently, and after consultations with the military departments, the Deputy Secretary of Defense appointed a Review Committee consisting of the Assistant Secretary of the Army, Mr. Karl Bendetsen, the Under Secretary of the Navy, Mr. Daniel Kimball, and the Under Secretary of the Air Force, Mr. John McCone. This committee recommended that certain preliminary ground rules be used as a basis for the conduct of a searching review and analysis of these estimates. At the request of the military departments, budget analysts of the

Office of the Assistant Secretary of Defense (Comptroller) and of the Military Estimates Division of the Bureau of the Budget, were loaned to the responsible reviewing officer in each Department. In the case of the Army I designated the Assistant Secretary, Mr. Bendetsen, as this reviewing officer. At this request the Army's Budget Advisory Committee participated in a 2 months' review of these estimates. I should like to add that on the basis of my experience as Director of the Bureau of the Budget, prior to becoming Secretary of the Army, I feel that a combined review of this type is not only in the interest of the taxpayer, but also in the interest of a balanced military program. I also feel that it is important that we make clear the nature and extent of the review and re-review to which this budget has been subjected.

PROCUREMENT

It was apparent at the outset that major procurement was the principal area requiring reconsideration. Chief among the factors determining the amount of money being requested in support of procurement was the necessity of keeping vital production lines in operation. To do this with the least possible fiscal 1952 money, we had to determine accurately the latest possible date when a repeat order would have to be placed in order to continue production of the item involved without a break. To help us with this aspect of forward financing, the Army retained the industrial engineering firm of Sanderson & Porter to examine the estimated recorder lead time on major selected items as developed by the procuring Services and their suppliers.

At the same time the staff of the Review Committee considered the availability of critical-source materials and the capacity of industry to produce military matériel during fiscal year 1952. The Committee took a representative sampling of items purchased by each of the Army procuring Services and studied in detail the computations underlying the 1952 budget estimates for these samples.

In this analysis a basic Army requirements form served as the vehicle for the review sampling. This form compels the using agency to show exactly how much is needed for specific purposes and to identify specifically the quantities on hand so that assets can be offset against gross requirements to determine the net quantity needed. In the case of each sample item, the procuring service had to justify each entry on this form in detail before the Review Committee. In other words, to show not only what was on hand but how it was to be used and exactly why additional items were needed; whether they were for consumption, for pipeline, for depot stocks, for issue to new units to be created during the coming year, and so forth. Based on this sampling, the committee developed formulas which were applied to the other items to arrive at across-the-board adjustments.

The reductions were then taken into account in reviewing storage- and warehouse-space requirements, the need for civilian employees and other related requirements so that all of the Army's appropriation needs were brought into balance.

CONSTRUCTION

At the same time, the Army's requests for military construction were subjected to screening by a panel of military and civilian advisers, the civilian advisers coming from business and industry. This panel required representatives of the requesting Army agencies to justify their requests against a set of specific bench marks. The revised requests were then again carefully screened by the Review Committee which made further downward revisions to keep our construction program in phase with the other Army programs.

We are keenly aware of the magnitude of the Army's fiscal year 1952 budget request. The very magnitude of this request made it imperative from my point of view that we give this budget the most careful consideration to see that the maximum utilization of the dollar was made. While I cannot assure you that this vast proposal is perfect in its every detail, I feel justified, as a result of successive screening steps I have outlined and of others which time has not permitted me to describe, in assuring you that this budget request, which will be later justified in detail before your committee, is sound.

PRODUCTION EQUIPMENT

This appropriation request will not provide the quantities of equipment which would be required to be on hand if an all-out war were suddenly thrust upon us. In this budget we have deferred requests for funding authority which would be needed to produce such quantities pending later evaluation of international outlook. We have accepted a calculated risk in placing maximum feasible reliance upon the creation of a military production base of high potential in lieu of huge stocks of reserve equipment. Such a risk would be unacceptable if this production base were to be destroyed by a stoppage of production. We, therefore, face the alternative, by next January, either of providing additional funds to continue production at the rate contemplated by this budget or slowing down the rates by stretching out deliveries contemplated by presenting projected schedules. I must also point out that this budget makes no provision for the costs of continued hostilities in Korea after the 30th of June 1951. This assumption was made solely for budgetary purposes and was grounded on the belief that estimates of combat consumption of matériel in Korea could more realistically be made at a later date.

Senator FERGUSON. I will just interrupt you this one time.

Does that mean that we will have a supplemental deficiency request for Korea if it continues after that?

Secretary PACE. That is correct.

Senator FERGUSON. This anticipates that?

Secretary PACE. That is correct, sir.

If present efforts to bring about treaties with Japan and Germany meet with success in the coming year additional funds would be needed because occupation costs would no longer be charged to the local economy.

MANAGEMENT TECHNIQUES

I should like now to outline for you some of the procedures we have adopted to aid in managing the military dollar. Sound management

of any large organizations, public or private, demands that operations be decentralized and controls be centralized, The Army, during this period of accelerated mobilization, is undertaking to apply this accepted principle to the maximum degree feasible. The process of decentralization follows the expansion of our program.

In order to broaden the base of decentralization it is first necessary to augment centralized management control. I should like now to mention some of the elements of the management controls we employ.

PROGRESS REPORTS

To make sure that all aspects of the Army program are proceeding in balance, we have a set of progress reports which show the Army's goals and its accomplishments. We have, during the past year, reestablished and improved these reports, many of which we had curtailed after World War II because of insufficient funds. This has been a major undertaking. We have instituted a system of progress reports covering personnel, units, training, supply, storage, distribution, maintenance, and procurement, and we are engaged in extending them to other major areas.

MAJOR PROCUREMENT REPORTS

To be sure that the Army is spending its money in an orderly way, we have developed a semimonthly report showing how much of our procurement and construction funds has been obligated and expended. A companion report projects 24 months into the future the planned production of each of approximately 1,100 items of major procurement, representing 80 percent of the Army's total procurement dollars. By establishing these projections well in advance we can assure the development of an orderly purchasing program. As actual deliveries are made, top Army management has advance warning of impending imbalances which require adjustment in our plans.

SUPPLY CONTROL SYSTEM

Equally important in managing our procurement program is the Army's supply-control system. Under this system the Army makes supply and demand studies at least twice a year for more than 600,000 items. These studies form the backbone of our supply-management program. They show the difference between what the Army needs and what it has on hand. Consequently, they involve a consideration and evaluation of past issue experience, issue trends, inventory positions, procurement lead times, obsolescence, program objectives, and similar factors. For the approximately 1,100 major items which account for nearly 80 percent of the Army's procurement dollars, these studies are reviewed at successive echelons of responsibility. The frequency of these reviews has been increased as our programs have expanded.

INVENTORY CONTROLS

Alongside our supply-control system is the Army's inventory-control system, which extends from the unit actually using the particular item up through a world-wide stock-control point.

Senator THYE. Mr. Chairman, may I ask Mr. Pace a question at that point?

That question is: How closely are your inventory stocks related and checked with that of the Navy and the other branches of the service, so that there is not a duplication of inventory?

Secretary PACE. That is, as I understand it—and I would like to be corrected if I am in error—one of the functions of the Munitions Board, to see that over-all we avoid duplication in the three areas.

There is likewise a very close liaison between the services to avoid that particular duplication, and I think probably the Chairman of the Munitions Board could speak to that point very effectively.

Mr. SMALL. I think it is close enough that we do have a central control. We review these programs one against the other.

Senator THYE. Mr. Chairman, I thank you for your permitting the interruption.

Secretary PACE. This system is aimed at providing an accurate, timely picture of the Army's inventory position. New ideas and techniques of control in this field are constantly being considered. In this connection a special Army consultant, formerly vice president-treasurer of Montgomery Ward & Co., has just completed an analysis of certain of our inventory-control practices and has recommended certain time- and dollar-saving controls to bring the Army procedures, insofar as feasible, in line with modern merchandising practices.

PRODUCTION SCHEDULING

Based upon the Army's supply- and inventory-control systems, a revised system of production scheduling has been inaugurated for each of the major items of Army equipment. This system is supplemental to that which has just been described to you by Assistant Secretary of Defense McNeil, and extends to the thousands of items on which schedules are not required to be submitted to the Munitions Board.

PROCUREMENT CONTROLS

As I have stated, procurement authority in the Army is necessarily delegated to the various technical services, all of which must abide by the rules set forth in the Armed Services Procurement Regulations and the Army Procurement Procedure. These publications establish uniform procurement policies and procedures which can be deviated from only with the prior approval of the Under Secretary of the Army, who is in charge of Army procurement. Uniformity of contracts is generally achieved by the use of standard contract clauses and forms. Notwithstanding delegation of authority to field offices to enter into Army procurement contracts, certain specific controls are maintained at Army Department levels over this delegation of authority by requiring that contracts of certain types, and contracts in excess of certain amounts, must be approved at this high level.

To assure that prices charged the Government reflect the lowest net cost, every effort is made to establish comparative prices through competitive channels. Wherever necessary to protect the interest of the Government, Army fixed-price contracts contain a price-redetermination clause, and it is now mandatory that all contracts contain a renegotiation clause.

AUDIT OF PROCUREMENT CONTRACTS

As a further safeguard all Army procurement contracts involving cost reimbursement or price redetermination must be audited by the Army Audit Agency as the work progresses. In addition, the Army Audit Agency at its own instance or upon request maintains a representative audit over all other types of contracts. The Comptroller of the Army, under whose supervision this work is conducted, maintains a panel of civilian advisers drawn from the accounting and auditing professions to assure that our methods are sound and effective.

MANAGEMENT-IMPROVEMENT SURVEYS

Management-improvement surveys are continuously being conducted by the Army at every echelon in order to improve Army efficiency. They cover every activity including, for example, utilization of personnel, stock control and storage. Some of these surveys entail the hiring of expert civilian consultants. We have recently engaged a group of experts from the Harvard Business School to assist us in insuring greater accuracy in the computation of military requirements and the interpretation of program objectives which are the basis for our budget requests. I have already mentioned to you the Sanderson & Porter type of survey. These surveys are of great value in appraising the effectiveness of Army procedures and I believe will be of increasing importance in securing additional business-like management methods within the Army.

Other important elements of the Army's military management improvement system, designed to increase the Army's effectiveness and, where possible, to reduce the number of items required for given purposes, are field force boards and our Operations Research Office. The latter agency conducts scientific surveys of field operations under combat conditions. It has been on the ground in Korea during substantially all of the campaign to evaluate the effectiveness and utilization of all types of Army equipment, weapons, and techniques.

This is not a proposition of a 1-week or a 2-week survey. The survey was carried on by ORO in many instances relating both to Army weapons and Army personnel and ran for a period of 6 months; it was then forwarded through FECOM headquarters and on then to the Department of the Army for evaluation.

FIELD FORCE BOARDS

Our field force boards test out new developments in equipment and weapons before they are accepted by the Army.

INFLATION COST INCREASES

In spite of the care which we exercise in spending appropriated funds, our money today buys fewer tanks, fewer combat boots, and fewer radios than it did in 1945 or even in June 1950. The most alarming reason for this is inflation. There are reasons, however, which have nothing to do with a loss of purchasing power. For example, the large cost increases in apparently comparable items which caused you concern in connection with the fourth supplemental appropriation, resulted not only from inflation but also from (1) the

inability of the Army and industry accurately to estimate the cost of new equipment never before produced and (2) substantial changes and improvements in the items themselves. I want to take advantage of this opportunity to illustrate typical cost increases and their causes by referring to specific items of equipment.

Inflation: Turning first to the items for which there have been no substantial changes in specifications since World War II, we see various degrees of inflation. Thus the cost of a high-explosive shell for a 105-millimeter howitzer has risen from $12.39 in World War II to $29.59. This increase is attributable to increases in the cost of labor and material over the past 6 years. Less severe, but still quite substantial, is the rise from $6.20 to $11.36 in the cost of a pair of combat boots. This is understandable in view of the fact that during the short time from July to September 1950 the price of hides advanced as much as 25 to 45 percent.

It is not necessary to go back as far as World War II to find illustrations of inflation in military items. Taking actual Signal Corps procurements in fiscal year 1950 of four items selected at random, and comparing them with fiscal year 1951 procurements of identical items, we find price increases due to inflation ranging from 15 percent for a portable power unit to 32.7 percent for a flashlight. Two-by-four pine lumber, on the other hand, has increased only 1.5 percent from $66 to $67 per thousand board-feet.

IMPROVEMENT OF TANK EQUIPMENT

There have been even greater price changes in those items which have been substantially improved since World War II. In such instances, of course, the increased price reflects the improvement in the item as well as the general increase in the cost of labor and material. The tank field provides graphic examples of this sort of change. As you know we have a new light tank, the Walker Bulldog, which we believe is the best tank in its class in the world. This tank cost about $175,000 in fiscal year 1951, but it is estimated that the unit cost of the greater quantity contemplated for procurement in fiscal year 1952 will be reduced to about $148,400. These figures are far above the $39,600 spent for a Chaffee, the light tank in World War II. The difference, however, is not all inflation. We estimate that the cost of the World War II light tank today would be about $79,000. Thus we have almost $70,000—the difference between $79,000 and the cost of the new tank—which represents improvements in the tank itself.

Senator FERGUSON. Are we using any in Korea?

Secretary PACE. The Walker Bulldog is not there at the present time. If I could, I would like to elaborate on that later.

Senator FERGUSON. Certainly.

Secretary PACE. Undoubtedly we get a lot more today when we buy a light tank than when we bought a light tank in 1945. However, you may fairly ask "Is the improvement worth the tremendous increase in price?" We think it is. We never change our specifications so as to increase the cost of any item until exhaustive tests have convinced us that the change will be worth the money. These improvements often mean battles won or lives saved.

The Walker Bulldog, for example, brings to the light tank class firepower superior to that of World War II medium tanks and mobility

equal to that of a World War II tank destroyer. As compared with the World War II light tank it has a considerably more powerful and accurate gun, greater agility resulting from an 80-percent increase in the horsepower-to-weight ratio, an improved cross-drive transmission, and a better electrical system.

There is a comparable improvement in the new Patton medium tank. In one engagement in Korea a company of Pattons, 16 in number, destroyed 11 and captured 5 Russian T34 medium tanks and destroyed 1 self-propelled gun. High-explosive projectiles fired by the Russian tanks damaged only the mufflers, tool boxes, fenders, road wheels, and tracks of our tanks, all of which were repairable within the company and were put back into action. The agility of the Patton, according to one battalion commander, is such that time after time it has been saved through its ability to maneuver quickly when facing antitank weapons and enemy tanks.

If I may add to what I have said here, I think it is important to recognize that it is valuable not only in winning battles, and not only in saving lives, which is No. 1 in importance in this country, but also in terms of capacity to get longer life and greater usefulness out of a tank by reason of its capacity to survive in battle. All those factors must be weighed in terms of determining whether you have exercised sound judgment in respect to more money to produce a better tank.

EFFORTS TO REDUCE PRICES

Turning to an item which I can show you, I have here two walkie-talkie radios—the SCR–300, which was used in World War II and which cost $178, and the newly developed AN/PRC–10, which cost about $425. According to the Bureau of Labor Statistics price index, the old type would cost about $325 today. The remaining hundred dollars is attributable to improvements. The new model is a better product in every way. As you can see it is considerably smaller than the old one and it weighs only half as much; it has greater range and an increase in channels from 40 to 170; it has a smaller battery which is more powerful and lasts longer than the old one; and finally it is more reliable and easier to maintain.

I do not want to leave you with the impression that all changes in cost are upward. We are continually striving to reduce prices, and there are instances of gratifying success along this line. For example, the engine for our new medium tank cost about $24,000 when production was beginning in the spring of 1950. Since that time its price has been reduced to $10,000. The causes of this reduction have been (1) price redetermination, (2) increased volume of procurement, and (3) improved production techniques. We should always keep in mind, however, that the reduction would probably have been even greater had it not been for inflation.

CLARIFICATION OF PREVIOUS COST COMPARISONS

In presenting cost comparisons to you in connection with the fourth supplemental appropriation we used terminology which was perhaps confusing. Some of the figures apparently left you with the impression that inflation had caused a threefold, fourfold, and in one

instance a fivefold increase in the cost of certain signal equipment between 1949 and 1951. We indicated, for example, that price increases caused the following differentials between those dates: Switchboard SB–86 (portable 30-line board for use by regimental headquarters), from $994 to $4,802; switchboard SB–22 (portable 12-line board for use by front-line units), from $518 to $1,454; radio set AN/TRC–24 (a 12-channel radio relay station for use by higher headquarters), from $4,597 to $20,185. These differentials between the estimates made in September of 1949 for fiscal year 1951 budget and the estimates made in March 1951 for the fourth supplemental fiscal year 1951 and the fiscal year 1952 budgets were due to several contributing factors. First, the 1949 estimates, which were made in the laboratories by Signal Corps engineers and were based on models of the finished product, were simply too low. These items are entirely new and were composed of miniature components. Because there was no manufacturing experience to serve as a guide, the Signal Corps and industry were unable to fully determine the difficulties inherent in their manufacture.

In the second place, after the first estimate was made we decided to increase our efforts to get many producers rather than a few busy making equipment for our armed services. With the promulgation of this policy by the Secretary of Defense in December 1950, we began to spread procurements among four or five producers although one could do the job. In this way we created production potential, but the cost of the increased training, tooling, and engineering is reflected in the price of end items.

Finally, the generally rising cost of labor and material is one, but only one, of the causes of the differential.

In several instances the necessity for obtaining supplies within a short period of time to fill an immediate need has meant increases in cost. This was particularly true in the case of cold weather type clothing where the retirement to support the Korean operation was immediate. For example, 233,000 additional winter pile jackets were required in Korea in a matter of about 5 weeks from the time the requisition was received in late November 1951. This time schedule was met by the Philadelphia manufacturing division of the Quartermaster, assisted by private industry. These jackets, however, cost $3.04 each to manufacture—exclusive of the materials, all of which were furnished by the Government—whereas similar jackets delivered according to a normal delivery schedule cost $2.37 each. Thus this hurry-up job, with the overtime and similar additional expenses involved, cost 28 percent extra. However, to make our men wait till summer for winter clothing would have been a poor way to economize.

I have given you quite a few details on the subject of increased costs because I think it is important to realize that several factors cause such increases. The first of these, inflation, takes our money and leaves us nothing to show for it. On the other hand, when we spend extra money for better arms or for developing more producers, we increase the present and potential combat effectiveness of our Army.

Senator O'MAHONEY. Thank you, Secretary Pace.

Secretary Matthews?

STATEMENT OF HON. FRANCIS P. MATTHEWS, SECRETARY OF THE NAVY

DEPARTMENT OF NAVY BUDGET REQUEST

Secretary MATTHEWS. Mr. Chairman, members of the committee, speaking for the Navy, we welcome this approach by the committee to a presentation of budget estimates and requirements.

The Navy's budget estimates are made on the basis of (1) a realistic determination of operational requirements, (2) a thorough analysis of required production and procurement, and (3) continuing surveys and checks on methods of distribution.

I wish to assure the committee at the outset that our budget estimates are not arrived at by any process other than hard work and conscientious minimum estimating, with due regard to the Nation's ability to pay, and to the dangers of inflation.

DETERMINATION OF REQUIREMENTS

Our first step in making the Navy's present estimates has been fundamental; namely, the determination of our requirements—how much of what the Navy and Marine Corps need to carry out their assigned functions, and when and where they need it. In an organization as technical and widespread as our Navy, the subject is not a simple one.

The Navy prepares program objectives for approval by the Secretary of Defense. The approved program objectives are incorporated into the basic Naval Establishment plan and this provides the basis for the calculation of requirements.

The basic Naval Establishment plan contains policy and planning guidance for the fiscal year, setting forth in detail the operating forces to be supported and the plans for their employment; the supporting establishment to be maintained and the missions of each of the activities; the authorized personnel, Regular and Reserve; and the state of training and readiness to be maintained—all of which have a bearing on requirements.

Senator FERGUSON. I want to compliment you on your using both sides of the paper. I notice the other service did not do that.

Secretary MATTHEWS. I am relieved you do not object to it.

MAINTENANCE AND MATERIAL IMPROVEMENT

Maintenance and material improvement, both for active and Reserve forces; a shipbuilding and conversion program; an aircraft-procurement program; criteria pertaining to maintenance of the shore establishment; the procurement objectives for material required to equip, train, and support the planned peacetime forces, both Regular and Reserve—all of these are specifically dealt with in the basic Naval Establishment plan.

In addition, procurement objectives for mobilization reserve stock are in this plan. The mobilization reserve stock is the material required in order to support joint mobilization plans until production capacity after mobilization is sufficient.

In developing the detailed requirements many factors are involved. Procurement lead time, deterioration, obsolescence, peacetime and

wartime usage factors, and present inventories are among those that must be considered. Continuing study and review are required to prepare for the future with no hoarding and a maximum of intelligent forehandedness.

After detailed requirements are established they are translated into specific budgetary programs, and subprograms for financing and management.

BUDGET PLANNING

Budget planning for the fiscal year 1952 started in January 1950. The planning must start at this early date to allow time for the numerous reviews to which the estimates are subjected prior to their being presented to the Congress. Due to the Korean situation, however, it was necessary to resort to supplemental appropriations for the fiscal year 1951 in order to (1) increase the operating forces, (2) support these operating forces, (3) provide for war consumption of material, (4) improve the operating forces by installation of advanced design equipment, and (5) expand the industrial production base. As these supplemental requests were prepared to meet the emergency conditions, detailed planning was continued toward an established readiness goal.

In December 1950 final guidance was received for the 1952 budget. A detailed plan, with its program objectives, was then prepared by the naval planners and approved by the Secretary of Defense. This plan was transmitted to the management bureaus and offices for computation of end-item requirements to accomplish the plan within the next 18 months. This translation of the plan into item and fund requirements was subsequently broken into two parts: First, that which could be accomplished during the fiscal year 1951, in what has now become the fourth supplemental, and, second, the 1952 budget.

These two budget requests, with detailed justifications and computations as prepared by the management bureaus and offices, were subjected to searching reviews within the Navy Department over a 3-week period in January and February. During the period February 8 until April 30, when the budget estimates were presented to the Congress, they were subjected to continuing and additional reviews by the Office of the Secretary of Defense and the Bureau of the Budget as outlined to you by Mr. Lovett.

Thus, the Navy budget requirements as they arrive here before you have been given a thorough and searching scutiny.

I would like next to give you some of the factors bearing on production and procurement, and how the Navy keeps control over expenditures.

PRODUCTION AND PROCUREMENT

The Navy's production and procurement programs are designed to assure the supply support of the operating forces and at the same time expand our national capacity to produce and broaden the industrial base for Navy suppliers. Further, we are trying to develop greater economic strength and industrial potential of this country, so that we can expand swiftly, should need arise, by having production lines in being. By this means the maintenance of greater amounts of mobilization reserve stock in store is made unnecessary.

In order to provide a sound budget for fiscal year 1952 and to assure the efficient and economical use of funds made available to the Navy, we are, as outlined to you by Mr. McNeil, establishing production and procurement schedules for the hard- and soft-goods items in the budget. These schedules are designed to provide realistic timing and priorities, so that all portions of production are in accordance with a predetermined time schedule. Such scheduling will be greatly aided by the controlled-materials plan which comes into effect on July 1, 1951.

An important consideration with respect to production and production capacity is the availability of facilities for production. By facilities, I mean to include both plants and tooling, and I also mean to include facilities necessary for industrial-mobilization planning as well as those necessary for current production and procurement.

The basic Navy policy on facilities expansion is that privately owned industrial capacity will be utilized before we expand facilities at Government expense. During the past year Congress has taken several steps to implement the execution of this basic policy. These steps include such inducements to private industry as accelerated tax amortization, direct loans, guaranteed loans, and advance payments.

Nevertheless, in spite of the basic policy that private industrial capacity will be first utilized, and in spite of the tax concessions and other forms of financial assistance which have been provided in order to encourage the use and expansion of private plants, certain military requirements cannot be met without the Government's construction or expansion of industrial plants. Plants which can produce only completed military items such as jet aircraft and jet engines, guided missiles, explosives, and ordnance equipment are not attractive private business ventures, even when it is permitted to write off the cost in 5 years' time pursuant to accelerated amortization. Hence the need for the Government itself to provide these plants.

GOVERNMENT RESERVE PLANTS

As a corollary to the above-stated policies on production facilities, it is Navy policy to utilize Government-owned reserve plants to the fullest extent possible in furthering the defense production effort. At the present time the Navy Department has direct sponsorship of 204 industrial plants. These plants either have been leased to industry with a provision for termination during a national emergency, or have been sold under terms containing a national security clause, which permits their recapture within 120 days. As a general rule these plants have been leased or sold to private contractors who, in accordance with existing plans, would use them for defense production upon mobilization. At the present time 162 plants are turning out products for which they were designed, or similar products, and 42 are in stand-by status or being used for civilian production.

PROCUREMENT POLICY

With respect to procurement, the Navy Department has made it a policy, whenever practicable, to develop two or more sources of supply for each important military item, whether purchased directly or on subcontract. Our purposes, in this program of procurement expansion, are threefold: (1) To lessen the dependence of military operations on a single source, (2) to promote competition and provide compara-

tive quotations for determining reasonable prices, and (3) to increase the production potential for full mobilization.

Additionally, each substantial negotiated procurement is examined to determine the extent to which subcontracting will be encouraged. This policy of broadening the industrial base will aid in the distribution of procurement contracts among the greatest practicable number of competent suppliers, and will result in the use of existing industrial capacity to the maximum.

To carry this policy into effect, and to facilitate the placing of contracts, negotiation has been authorized, during the period of the national emergency declared by the President on December 16, 1950, in accordance with the authority contained in the Armed Services Procurement Act of 1947.

However, the formal advertising method of procurement continues to be used in all appropriate cases, but not when such use will adversely affect the acceleration of procurement, or interfere with the broadening of the industrial base of suppliers.

NEGOTIATION OF CONTRACTS

I want to emphasize the point that negotiation does not preclude competition or mean an absence of competition.

Usually there is just as much if not more competition between prospective suppliers in a negotiated procurement as there would be in an advertised one. In fact, negotiation in some cases may develop competition which might be lacking in advertised procurement. Negotiation simply means that the formal advertising procedure, with its sealed bids and set bid-opening time, is omitted.

INFLATION PRICE INCREASES

One of the most important problems facing the military today is the effect of price increases upon military procurement and in turn upon the amount of material which the Navy is able to obtain for the appropriated dollar.

These increased prices are due in part to increased wages for labor. For example, between 1939 and 1950 steel workers' wages increased 58 percent, carpenters 70 percent, and common laborers 73 percent. Building materials for naval construction increased during the same period in the neighborhood of 115 percent.

Increased costs are also in a large measure due to technological advances and improvement in design. For example, Navy patrol planes in 1939 had only nine electronic devices installed. Today they have 26. Destroyers in 1939 had only 12 pieces of electronic equipment. Today they have 196.

Price increases since 1950 have made our budget estimating problem even more difficult. Indexes prepared by the Bureau of Labor Statistics indicate that the prices of semimanufactured articles increased by 26.3 percent between June 1950 and March 1951. The price of manufactured articles increased by 14.5 percent during the same period. The following naval items are indicative of this trend:

Recent price increase, 1949–50 to 1951

Material:	*Percent increase*
5-inch gun cartridge case	124
Gun fire-control system	38
Kersey wool cloth, 30-ounce	114
Navy blanket	143

It is quite understandable that producers of military supplies and equipment have been loath to accept firm fixed prices for the production of Navy requirements. It is not in the national interest to subject the procedures of military supplies to undue financial risks by refusing to recognize and attemtping to eliminate contingencies with respect to increases in the cost of the materials and services which they must use to produce the end items. However, it is at the same time essential to avoid inclusion of large amounts in the negotiation of contract prices to cover contingencies which may never arise.

To an attempt to eliminate contingencies insofar as possible, and to place orders for needed supplies in the maximum amounts possible, the Navy is using contract clauses which permit downward as well as upward revision of the contract price by revising that price when there is sufficient production experience to permit the negotiation of fair and reasonable firm prices. Under some clauses currently used, the contractor has an incentive to reduce costs by more efficient production. As the costs decrease below a target price, the contractor is permitted to share in the savings effected by his more efficient production.

In those instances where only specific labor or materials costs are in doubt, the Navy is using excalation clauses. Under such clauses the Government is obligated to increase the contract price only if there is an increase in the cost of the specified materials or labor. By the use of these clauses we have been able to negotiate fair and resonable prices without the inclusion of large amounts to cover possible price increases which may never occur, even at the same time that we have felt keenly—and will continue to feel, perhaps, ever increasingly—the impact of price increases upon our procurement program.

It must be recognized that in order to achieve an expanded procurement program, we will in some cases be obliged, initially, to pay higher prices than if we should place our total procurement requirements with fewer sources. It has been our interpretation that under the negotiation authority of section 2 (c) (1) of the Armed Services Procurement Act we had the statutory right to do this.

In exercising this authority, our sole consideration has been to further the interests of national security. Where the interests of national security also make it possible to serve the interest of small business concerns, that is accomplished concurrently, as outlined to you by Mr. Small.

EXPENDITURE CHECKS

Distribution: Military appropriations are made available for the purpose of promoting national security. Therefore, it is the purpose of the Navy to attain this military objective and at the same time expend Navy procurement funds in a sound, businesslike manner.

I should like to bring briefly to the committee's attention at this point a few of the measures by which the Navy checks the expenditures of its moneys in getting production and procurement to the consumer—the operating forces.

DEFENSE CATALOG

First, there is the Navy part of the defense catalog program. The objective of this program is to develop a catalog of material based upon a common numbering system. The accomplishment of this

objective will result in the determination and elimination of duplicate items in the supply system.

WORK MEASUREMENT PROGRAM

Then there is the work measurement program. The objectives of this program are—

(1) To develop performance data as a basis for establishing standards. These standards are used for determining military and civilian personnel requirements in functions that are common among naval activities, and functions which are peculiar to a Navy bureau or office and its field activities.

(2) To provide factual data, based on past experience, for relating manpower requirements to workloads. These data are used in the evaluation of manpower utilization by the bureaus to insure optimum use of manpower within field activities. They are also used in budget justifications.

MATERIAL REVIEW BOARD

We also have our Material Review Board, which—

(1) Conducts a continuous and comprehensive audit review of major material programs and policies as they relate to the support of strategic requirements, giving consideration to rates of use and attrition, inventory levels, relative priorities, and other relevant factors; and

(2) Determines the adequacy and balance of requirements on the one hand, and prevents overemphasis of premature time phasing of delivery of requirements on the other.

This material review insures that coordination of procurement and production programs in the Navy is adequately accomplished.

INVENTORY CONTROL

Through the inventory-control procedures employed in the Navy supply system, we know what we have on hand and on order at all times. Based upon this information, material requirements are computed at frequent intervals. These requirements are translated into procurement and distribution actions in order that material is available when and where required. Material under procurement flows into the Navy supply system through its network of Navy supply centers and depots, to the large industrial facilities and, finally, as a result of redistribution action, to the end consumer; i. e., operating shore activities and forces afloat in accordance with predetermined needs.

ON-SITE SURVEYS

And, finally, we are conducting continuous on-site surveys by experienced boards, under our Naval Inspector General. The purpose of these surveys of our shore establishment is to check upon economy of management and industrial efficiency, including maximum productivity of manpower. Leading private industrialists are frequently invited to accompany these boards and take part in the surveys. In this way the Navy takes advantage of the up-to-date thinking and latest developments of private enterprise to assure efficiency in our industrial establishment equal to that of private industry.

EFFECTIVENESS OF NEW EQUIPMENT IN KOREAN WAR

Combat operations are, of course, the real measure of the "consumer" or distribution phase. In actual combat operations all of the planning, production capacity, procurement, engineering and labor skills and distribution methods are tested. It is to this end—and to this end only, in reality—that our efforts are directed. Everything else, in the final analysis, is a means toward this end.

In this connection I should like to touch upon a few of our Korean experiences.

Recent Navy and Marine Corps action in Korea has demonstrated generally successful equipment design policy. As a proving ground for new weapons, techniques, and equipment, these operations have usually confirmed development trends and indicated specific areas for new applications.

One outstanding example of success is the helicopter. These rotary wing craft have performed important services in mine reconnaissance, wire laying, evacuation of casualties, air-sea rescue and liaison duties.

The shaped-charge rocket is another highly successful piece of equipment which had a long design and development background but was rushed into production in 6 weeks. The improved napalm fire bomb is still another ordnance item of outstanding proven success.

Senator O'MAHONEY. What do you mean by a shaped-charge rocket?

Mr. KIMBALL. It is a rocket that concentrates the power into a very narrow space. It places the war head explosion over 5 inches. It will come down to about one-quarter of an inch. It will throw a stream of fire through 15 or 20 inches of armor.

Secretary MATTHEWS. Fast carrier task forces and their versatile carrier-based airplanes have been most effective. With the aid of mobile logistic support units, these aircraft carriers have operated at sea for long periods of time and through extremes of weather without reduction of effectiveness.

Improved radar performances and improved methods of spotting and control of naval gunfire have made naval fire support an important factor in the Korean operation. At Inchon, it covered the landing, silenced enemy defenses and made possible a successful amphibious assault with few casualties to the assaulting forces. At Hungnam, the protection provided by naval gunfire made possible an orderly withdrawal of Army and Marine forces together with practically all their supplies and equipment despite the pressure of the Communist ground forces which had forced the withdrawal. It also made possible the evacuation of over a hundred thousand Koreans fleeing before the onrush of the Communist Army.

Throughout the Korean campaign, naval gunfire support, using methods and techniques developed during and since World War II, has been used with great effectiveness to support our own troops when they were within range of naval gunfire; to prevent the movement of Communist forces by coastal roads and to destroy coastal roads and railroads by which Communist forces were being transported. It also has provided covering fire necessary for protecting mine sweepers operating within range of enemy shore batteries.

These successes, however, have not lessened the necessity for unceasing effort toward improvement of materials and techniques.

Research and development must continue. They are necessary to insure that our material support is worthy of our combined Army, Navy, Marine Corps, and Air Force combat teams, upon which the defense of this Nation depends.

In conclusion may I say again that we welcome this approach by your committee to the presentation of budget estimates and requirements. I hope the brief summary of Navy procedures I have presented will be of assistance to the committee.

Senator O'MAHONEY. Thank you, Secretary Matthews.

Secretary McCone?

STATEMENT OF HON. JOHN McCONE UNDER SECRETARY OF THE AIR FORCE

DEPARTMENT OF THE AIR FORCE BUDGET REQUEST

Mr. McCONE. Mr. Chairman, I do not have a written statement because I wish to present for Secretary Finletter by means of a few charts some points in connection with the Air Force program which I felt would be of interest to this committee.

I first want to review the organization that is existing in the Air Force for programing, budgeting and controlling our operations, personnel, and the procurement program. In other words, our management tools. I would then like to review by a chart the very difficult task of priming, training, and organizing an Air Force unit because of the lead times involved in those various activities.

I would like to demonstrate the complexity of our modern equipment as compared with World War II equipment and give you some visible effects of how our management control operates in the field and the results we get from it.

Finally, I would like to discuss briefly the problem of increased prices.

Before proceeding, however, I would like to say for the record that to review the Air Force preparation of the budget would repeat very largely the statements made by Mr. Lovett, Mr. McNeil, Secretary Matthews, and Secretary Pace.

PROGRAMING AND CONTROL

We have followed substantially the same procedure and the same series of reviews followed by the other services. We have cooperated continually with the Munitions Board in connection with small-business activities.

The first chart I would like to discuss shows the general organization of the Air Force on which I have laid particular emphasis on the activities of programing and control. At the top of the chart is the Secretary of the Air Force that controls its entire operation. I act as his counterpart as the Under Secretary. We have two Assistant Secretaries. Then there is the Chief of Staff with his Advisory Chiefs of Staff directly under him at staff capacity, five deputies, each of which have staff responsibilities in connection with command activities and also control responsibilities which I intend to discuss in some detail.

Under the Chief of Staff are fur several combat training and support commands. I believe the committee is familiar with those.

POLICY COMMITTEES

At the Secretary level we operate through three principal committees. First our financial policy committee, of which Secretary Zuckert is the chairman. That reviews weekly the fiscal affairs of the Air Force. It directs its attention particularly to the manner in which we are obligating and spending our funds. At that meeting which is attended by the Secretaries and myself, by Secretary Gilpatric and by several members of the staff, all matters relating to fiscal policies are brought up and decided.

We have an installation policy committee that has to do with our installations, our facilities world wide. That committee is a particularly important committee at the present time because of the installation program of the Air Force is very large indeed.

We have a procurement policy committee of which Assistant Secretary Gilpatric is chairman because his responsibilities run to procurement. It is that committee that establishes and reviews the procurement practices and establishes procurement policies within the Air Force.

The operations of the Air Force are under the direction of course of General Vandenberg, the Chief of Staff. His deputies are organized into several boards who either originate the policies or carry out said policies in connection with the Air Force. Most important is the Air Force Council which is an organization of the five deputies and at that council the major policies of the Air Force are established subject, of course, to the approval of General Vandenberg and the Secretary.

At the staff level there is a budget advisory committee that continually reviews and approves for submission to the Secretary and to the Office of Secretary of Defense the budget, and an installation board that reviews every single installation required by the operation of the Air Force, and a senior officer's board for aircraft. That board reviews and approves the recommendations of the Research and Development Command and the Matériel Command with regard to the aircraft that enter into the Air Force program.

We have on the air staff a programing organization under General Todd. This organization, which is very large, has the responsibility of developing all of the programs for the Air Force. The programs are developed to serve as a guidance for the deputies and for the commands in carrying out their responsibilities to obtain the broad objectives of the Air Force.

SCHEDULES

The programing organization develops program schedules. They analyze all the schedules for balance to see that personnel, facilities, matériel, and aircraft are properly phased to come into being at the proper time. This organization continually renews the progress of all of the programs within the Air Force and serves to advise the Secretary and the Chief of Staff concerning any slippage or any area in which the established program schedules are not meeting the objectives.

Each one of the deputies under General Vandenberg, in addition to their staff activities, has a control function and an organization established for that. Perhaps the most important is the comptroller with

his monetary control. They extend to the establishment of budgets, the analysis of costs, reports, and analysis of all operations from a fiscal standpoint, a complete auditing function and the developing of all planning factors such as flying hours, matériel support, et cetera.

MANPOWER CONTROL

In operations we have a manpower control under Major General Lynch. This division of operations is responsible for creating our manpower requirements for the various commands. They are responsible for manpower programing and for manpower utilization and for management improvement as regards manpower.

PERSONNEL

The Personnel Division taking the manpower requirements established by operations is responsible through their control functions for the qualitative requirements of personnel, the control of personnel and training flow, and for personnel management.

RESEARCH AND DEVELOPMENT

The Deputy Chief of Staff of Research and Development has the primary responsibility of the qualitative requirements of the Air Force and our equipment. He is responsible for determining operational suitability of equipment and the research and development-program that is necessary in order to develop the desired qualitative requirements.

The Deputy Chief of Staff for Matériel is responsible under his Control Section for quantitative requirements as contrasted with the qualitative requirements of research and development. He is responsible for scheduling the actual procurement of the material, for the logistic feasibility or feasibility of needing the schedules, for the matériel budgets and for the programing of all of our procurement activities. These are control activities and staff activities. Of course, at the command level the actual operation is done, the most important of which, from the standpoint of this discussion, is the Air Matériel Command and with the Air Matériel Command rests complete responsibility for all procurement in the Air Force.

In that regard the Air Force differs from both of the other services because we have all procurement concentrated in one command; whereas both the Navy and the Army have procurement carried on in several bureaus or several technical services.

That, in general, Mr. Chairman, outlines the organizational plan of the Air Force and the permanent established control mechanism to insure the careful programing and the proper handling of the funds which we are applying for.

WING ORGANIZATION

I have here a schematic chart which gives something of the problems this organization must involve itself with in a decision to create a combat wing ready to fight. We first must allow a certain amount of time in which all of the elements of that wing are assembled together and trained as a group. Six months is required for that period in our

estimation. Therefore, we say at this point we must be sure that we have the installations, that we have the people, that we have the equipment, that we have the airplanes.

So we have to consider then our lead-time factors. They vary and that complicates the problem. Operating bases—you can see we must plan for programing, design, for either the modification of existing bases or for the construction of new bases.

Senator O'MAHONEY. May I interrupt, Mr. Secretary? What is the significance of the length and the number of the various bars appearing on this chart?

Mr. MCCONE. The actual figures were removed because of the fact that in the opinion of the Air Force there was a matter of security involved.

Secondly, it varies a bit for different types of wings. It would be one thing for a fighter wing and another thing for a bomber wing. I would be happy to discuss in an off-the-record discussion just what is involved in terms of time for each one of the wings if you desire.

Senator O'MAHONEY. The answer there to the question is that these bars by the number and the length indicate certain statistical information which you would not want represented in figures on the chart?

Mr. MCCONE. That is correct.

Mr. LOVETT. It is a period of time.

Mr. MCCONE. You see probably the most serious and longest time is required in the training of pilots and the training of people to handle this very complicated equipment that goes into a modern combat wing. Ground equipment and miscellaneous equipment such as generator sets, special tools, and aircraft jacks require in themselves a considerable lead time but less than either people or airplanes.

This indicates the time required for the airplanes. In advance of all of this we must have a period of time for planning and a period of time for appropriate action with the Secretary of Defense and the Bureau of the Budget and the Congress.

So, from this chart you will see that a very substantial time elapses—and that differs for different types of combat planes—from the time a plan is first evolved to build a new wing in the Air Force and the time that wing is ready to operate.

I would like now to discuss something of the complexities of the present equipment used by the Air Force as contrasted with the equipment of World War II. As a matter of illustration, I would like to compare the B–17, which was the famous medium bomber of World War II, and the B–47, which is our new jet bomber. In terms of weight, the B–17 weighed 52,000 pounds; the B-47, 181,000.

In terms of speed, the B-47 will operate more than 2½ times and will carry more than 2½ times the bombload, and its combat radius is doubled. Its normal crew is less than one-half, and its power is eight times as great.

Senator O'MAHONEY. Would it be possible for you to have a chart of this kind prepared for inclusion in the record?

Mr. MCCONE. I would like to submit all of these charts for the record if I could.

(The charts referred to follow:)

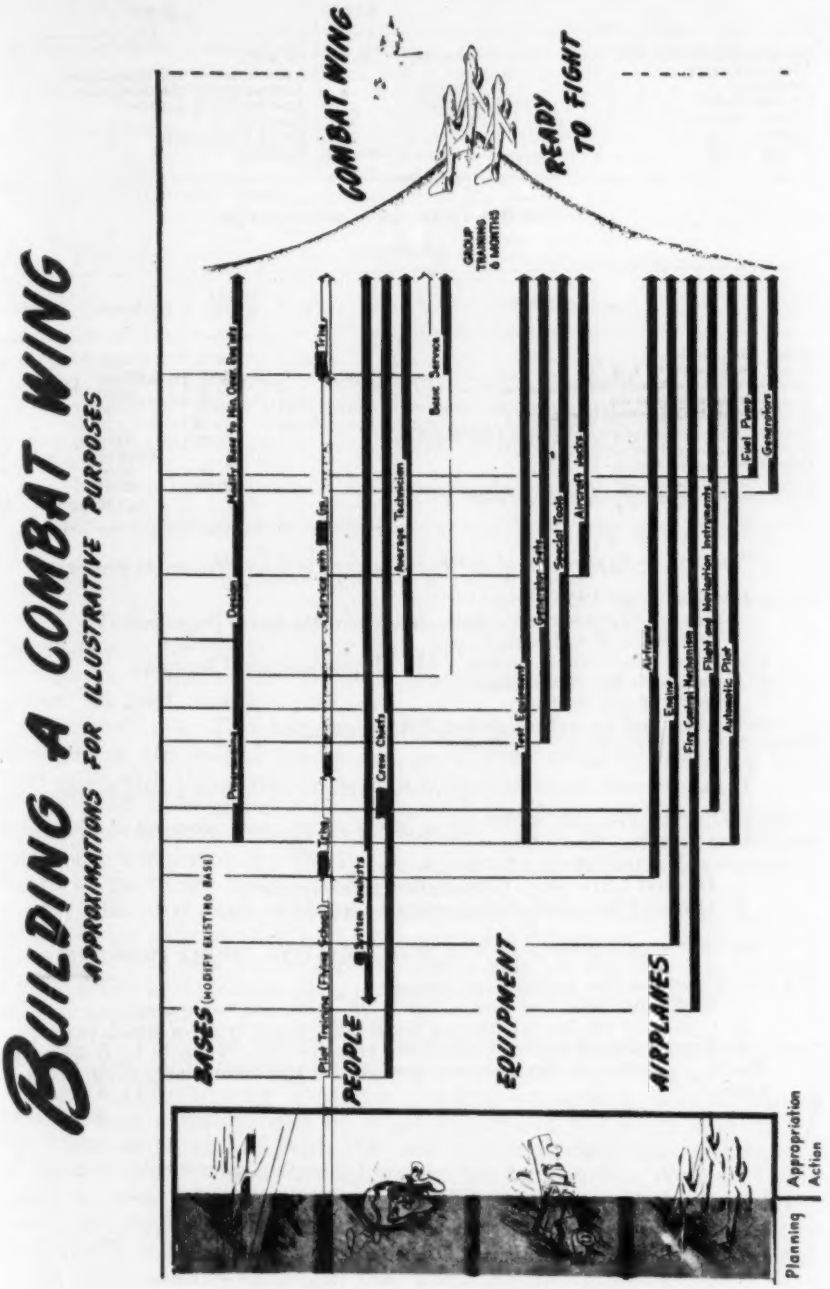

TABLE A.—*Performance and cost comparison—B–17E versus B–47B*

	B–17E	B–47B
Gross weight at take-off.....pounds..	52,780	181,440.
Maximum speed.....	.....	Approximately 2½ times faster.
Bombload.....pounds..	.....	Approximately 2½ times more.
Combat radius.....nautical miles..	.....	Approximately doubled.
Normal crew.....	.....	Less than ½.
Power.....	.....	Over 8 times more.
Program cost.....	$402,000	$3,476,000.

TABLE B.—*Examples of price changes*

[In dollars]

Item	World War II	Pre-Korea	Present
Shoes, low quarter.....	4.10	4.10	7.25
Truck, cargo, 4 x 4, ¾ ton.....	.....	3,970.00	4,695.00
Drafting machine (office).....	42.60	58.63	67.00
Steel (per 100 pounds).....	2.10	3.40	3.65
Aircraft bulk lubricant (per gallon).....	.29	.20	.36
Lumber, standard general purpose (per 1,000 board feet).....	70.00	90.00	100.00
Gasoline engine, driven pump.....	.....	1,032.00	1,764.00
Office furniture, steel desk.....	61.00	59.00	80.00
Tire, 27-inch.....	30.83	40.95	46.22
Paper products (bond typing paper per ream).....	.....	.28	.34

TABLE C.—*Application of Air Force controls to the public-works program*

Screening fiscal year 1952 budget:

1. Estimate of major commands and other Air Force programs.
2. Installation Board review.
3. Civilian Committee review. Mr. Howard Bruce, Chairman.
4. Secretary's Review Committee.
5. Bureau of the Budget.

Program presented for authorization, 3.6 billion.
Fiscal year 1952 funding, 2.4 billion.

TABLE D.—*An agency for efficient operation, equipment survey boards*

Purpose.—To survey field utilization, effectiveness, and necessity of equipment authorized by tables of equipment.

First Board.—After 6 months' field study:

1. Deleted 5,318 items from Tables of Equipment.
2. Directed less expensive substitution for 375 items.

TWENTY-ONE EXPERTS IN FAR EAST SURVEYING COMBAT CONDITIONS

Current Board.—One preliminary finding:

1. C–6 bomb hoist authorized for B–26 units, not being used.
2. C–6 hoist can be substituted for B–29 hoist, supply of which is low.
3. Survey Board caused immediate transfer of C–6 hoists to B–29 units, effecting substantial savings in material, transportation, and elimination of waste.

TABLE E.—*An example of management technique*

Agency	*Actions*
Budget Advisory Committee	Review discloses excessive B–36 spare engine request.
Financial Policies Committee	Reviews and concurs in BAC findings; requests action by Air Force Council.
Air Force Council	Reduces number of spare engines; directs matériel-comptroller team to study methodology used in computing requirements.
Matériel Comptroller Team	After study, constructs new formula, reducing pipeline requirements for movement of spare engines.
Net result	1. B–36 spare engine requirements reduced 25 percent. 2. 54.5 million saved.

TABLE F

In summary:

1. Modern equipment is highly complex and expensive.
2. Inflation has increased cost although volume savings tend to hide effect.
3. Top Air Force management realizes its obligation to conserve personnel, material, and financial resources while producing a maximum combat potential.
4. Management controls are increasingly applied to accomplish our objectives.
5. Our organization to handle these matters is growing stronger daily.

COMPARISON OF B–17 AND B–47

Mr. MCCONE. The program cost of the B–17 was $402,000. The program cost for the B–47 is $3,476,000.

Senator O'MAHONEY. What is the significance of the word "program" as used there?

Mr. MCCONE. The program includes the cost of the airplane and the cost of the initial spares and parts that must be procured concurrently with the airplane in order to maintain it.

The difference in these two figures is quite staggering. However, when you consider this airplane has eight times the power and three times the weight of the B–17, the difference is perhaps not as significant as the dollar figures would indicate.

Mr. Chairman, you would be interested in this, which is a section of the outer skin of the B–47 indicating its thickness. I will hand it to you. Here is a section of the outer skin of the B–17 indicating its thickness and a comparison of the two is a measure of the complexity of the problem.

I think these two diagrams illustrate in a rather interesting way some of the complexities of the modern aircraft.

Senator O'MAHONEY. Perhaps it might be appropriate for me to remark that a comparison of these sections of the outer skin of the old plane as compared with the new makes it clear that the section of the new plane which is roughly 3 inches by 2 inches, comparatively small in area, is altogether adequate for a paperweight; whereas the other one would be utterly useless as a paperweight. I say that for the benefit of the record because they cannot be otherwise described.

Mr. MCCONE. We thought you would be interested in that.

This is a schematic diagram of a B–17 landing gear despite the fact that in World War II we thought it was quite a complicated device. It looks very simple here as compared with the landing

gear of a B–47. Just a glance at the sketch and without going into the technology of it, you can see how enormously complicated this article is as compared with the B–17.

BOMB SIGHT

I thought the committee would be interested in the bomb sight in the B–47 as compared with the famous bomb sight of World War II. This is a complete Norden bomb sight. You are all more or less familiar with it. It operated very satisfactorily at relatively low altitudes. The price in production of 300 items was $8,000 apiece then. This very complicated device is a very small part of the tracking computer of the K–2 system. I invite your attention to how exceedingly complex it is. The cost of this unit is $50,000. That is only part of the story because that tracking computer only represents that small part of this whole complex of electrical gadgets that make up an optical radar bombing navigational system of the modern heavy or medium bomber. The cost of the entire system runs in the order of $250,000 for a complete system.

Senator O'MAHONEY. When you speak of a system, you are speaking of a system for a single plane?

Mr. MCCONE. That is right. We speak of the system as the system that is contained in a single plane.

I tried to get a similar example for you on cameras, but I was unable to do so because the door was not big enough to bring in the modern camera.

Senator O'MAHONEY. Let the record show this is not a small door.

AERIAL CAMERA

Mr. MCCONE. I have a very interesting photograph, Mr. Chairman. It was taken by one of the modern reconnaissance cameras at 9 miles, 45,000 feet, in the B–47 aircraft. The interesting part of this is the extreme detail. You can see every automobile on the street. Here on this golf course you can see two golfers. By use of this magnifying glass you can see the golf ball on the green, and that was taken at 9 miles up.

Unfortunately, we must go to this type of very complex and expensive equipment. The mission of the modern aircraft is entirely different that the mission of the World War II aircraft.

All of these very complicated devices are necessary for the accomplishment of today's mission which involves flying at very high altitudes, the altitude of 8, 9, and 10 miles, at speeds that are approaching the speed of sound. Consequently, the problems of navigation and of accuracy of bombing are entirely different than they were in World War II. They are beyond the capacity of any visual device such as the original Norden bomb sight.

FIELD SURVEYS

Turning to some aspects of our planning and the effect of planning, I have one or two examples that just show in a tangible way how some of the things we do nets results for us. We recently organized a field survey utilization, effectiveness and necessity of equipment authorized by tables of equipment board. We have within the Air Force, as does the other services, what we term our tables of equipment for all of our different units. We continually survey those in the field to see that

they are right. A recent 6 months' survey caused the deletion of 5,318 items from tables of equipment that were surveyed and directed the substitution of 375 items because they were less expensive than the original items.

Another example of management—we sent a group of 21 experts to the initial Far East to survey our tables of equipment under combat conditions. In one finding we found where the C–6 bomb hoist that was sent over for the B–26 units was not being used. The B–29 units, on the other hand, have no bomb hoists. We were under great difficulty here to try and activate the factory to manufacture bomb hoists, the factory which had gone out of production. The Board determined that the B–26 bomb hoist could be used in the B–29. They effected a transfer from one command in one area of the Far East to the other, with the result of substantial savings in material, transportation, and the elimination of waste.

I cite those just as two concrete examples of things that are going on every day.

This is an interesting example of a series of actions. The budget advisory committee at that level in reviewing our requirements for the B–36 program determined there were B–36 spare engines on request. The Financial Policy Committee concurred in and approved the findings of the Budget Advisory Committee and requested action by the Air Force Council. The Air Force Council reduced the number of spare engines and directed the matériel and comptroller team to study the methodology used in computing requirements. After the study was completed, a new formula was developed and new pipeline requirements were set up for this particular engine. The result was there was a reduction of 25 percent in the spare engine requirement for the B–36 and a saving of $54,500,000 in the particular budget under review.

This is another example of a series of reviews on our public works program and the effect of screening. We started by an estimate of the major commands and other Air Force programs in regard to their requirements for public works. Those were reviewed by the Installation Board and a substantial reduction resulted from that review. We were not entirely satisfied, neither General Vandenberg nor Secretary Finletter, so we employed a civilian committee of competent individuals under the chairmanship of Howard Bruce, and they reviewed the findings of the Installation Board and made another reduction. Then there was a further review by the Secretary of the Review Committee and a final review by the Bureau of the Budget.

The final program after the fifth review was $3.6 billion request for authorization and $2.4 billion sum which must be funded in 1952. Those indicate to you how this process of review and control continually works.

I thought the committee would be interested to know that they do actually work. I thought those examples would be of particular interest to you.

INFLATION COST INCREASES

I would like to discuss for just a minute what we are up against on prices. I thought it would be best to consider price of materials rather than end products such as airplanes, because there our prices are adversely affected by inflation; but they are favorably affected by quantity production. So the price today and the price a year ago

is not comparable because of the quantities being produced. However, here are some very interesting things. Shoes, of a type—the World War II price was $4.10. The pre-Korean price was the same. There was no increase there. The present price is $7.25.

Then we have a 2½-ton truck. The price pre-Korea was $3,970. The price now is $4,695.

Then we have a piece of office equipment, a drafting machine. In World War II we paid $42, pre-Korea $58, and now we pay $67. The price of steel per ton as published in the Iron Age in World War II was $2.10 or $42 a ton. Pre-Korea it was $3.40 or $68 a ton, and the present price is $3.65.

Air bolt lubricants in World War II were priced at 29 cents a gallon and they gradually declined until the price pre-Korea was 20 cents but it is now up to 36 cents.

Lumber was $70 a thousand, then it went up to $90 a thousand and now it is $100 a thousand.

A pump driven by a gasoline engine, a standard piece of equipment for the Air Force, pre-Korea was $1,033. Today it is $1,764. That is a 70-percent increase in price.

Office furniture: The price of a steel desk has increased from $59 to $80 since the start of the Korean conflict. A 27-inch automobile tire was $30 in World War II. It is $40.95 pre-Korea and now it is $46.22.

Paper products, bond typing paper: Pre-Korea the price was 28 cents; now it is 34 cents. That gives you some indication of what we are up against on prices.

I have tried to demonstrate by these charts our modern equipment is highly complex and expensive. Inflation has increased our costs although volume savings tend to hide the fact in some of our end products.

Top Air Force management: The Air Force realizes its obligation to conserve personnel, material, and financial resources while producing a maximum combat potential. In that regard, as the other services are expanding, we are expanding our production base and providing for duplicating sources of production on all of our end items. Management controls are increasingly applied to accomplish these objectives. We are organized to handle these matters and our organization is growing stronger every day.

I thank you, Mr. Chairman.

Senator O'MAHONEY. Thank you very much, Secretary McCone. Let me say I think this has been a most excellent and impressive statement. It reveals in a way that has never come to my knowledge before the magnitude and complexity of the task which the Department of Defense must carry through. I am sure it has been most impressive. The committee will not be able to sit this afternoon. It would be very inconvenient for some of the members to sit tomorrow.

I am wondering, Secretary Lovett, if it would be agreeable for your group to return here Monday morning for such questioning as the members of the committee may wish to undertake.

Mr. LOVETT. Certainly, Mr. Chairman. I think if it meets the wishes of the committee we may have to run in one or two substitutes.

Senator O'MAHONEY. The committee will now stand in recess until 10 o'clock Monday morning.

(Whereupon, at 12:35 p. m., Thursday, June 7, 1951, the committee recessed until 10 a. m., Monday, June 11, 1951.)